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ABSTRACT

This study examined characteristics of the student bodies of highly selective and less-selective colleges and universities specifically those related to race and socioeconomic status (SES) and the possible effects of replacing race and ethnicity with SES as a method for ensuring student diversity. The study used data from the Cooperative Institutional Research Program (CIRP), specifically data from freshmen (n=4,408) entering college in 1986. Independent variables included socioeconomic factors (income, parents' educational levels and occupations), race, and background factors (Scholastic Aptitude Test (SAT) scores, high school grades, gender, and high school rank). Institutional selectivity was the dependent variable. Analysis confirmed the hypothesis that academically and socioeconomically advantaged students are more likely to attend highly selective institutions than other students, and six of the nine independent variables were found to be significant predictors of attendance at a selective institution. Although SAT scores and high school grades were the strongest predictors of institutional selectivity, family income, parents' education, and gender also contributed significantly. Also, twice as many white and Asian students attend highly selective institutions as compared to other racial groups. Results suggest that replacing race with socioeconomic status in affirmative action policies for college admissions would assist in diversifying student bodies. (Contains 30 references.) (DB)

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**Redefining the Virtuous Cycle:
Replacing the Criterion of Race with
Socioeconomic Status in the Admissions Process
in Highly Selective Institutions**

By

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"I know that men are likely to bring what are only their prejudices to the judgment of alien peoples. Avoiding that is one of the main purposes of education."

Bloom. *The Closing of the American Mind* (1987) p.40.

The ongoing national debate regarding the use of affirmative action in college admissions decisions has intensified again as a result of the Fifth Circuit Court's decision in *Hopwood* versus the Regents of the University of Texas (1995) and recent legislative action regarding the use of race-based affirmative action in California (1996). Institutions around the country that are selective in their admission of students are evaluating how they might, without considering an applicant's race, ethnicity and or gender, continue to work at diversifying the student bodies of their campuses. The socioeconomic status (SES) of an applicant is one factor that may provide these unique institutions of higher education with a more socially acceptable and legal way to ensure a diverse group of matriculants each year.

Would affirmative action in the form of admitting students from underrepresented socioeconomic levels serve to diversify the student bodies of selective institutions? If so, in what ways?

This study attempts to better understand the characteristics of the student bodies of selective colleges and universities, specifically those characteristics related to students' race and socioeconomic status, and the subsequent effect(s) of replacing race and ethnicity with SES as the primary factor used in ensuring diverse student bodies.

The focus on selective institutions of higher education is based on the evolving value of a college degree. Primarily due to the inflation of the amount of education needed for access to well paying careers, the rate of college attendance continues to increase (as demonstrated by the proposed federally supported Hope Scholarship Program). As the achievement of a college education is increasingly becoming more commonplace, the pedigree of one's higher education, historically one of the most obvious delineating and determinant factors of American social and economic strata, is increasingly important. In many ways, this dynamic has led to a "virtuous

cycle," in which academic and socioeconomic advantage leads to educational attainment and academic achievement, which in turn leads to academic and socioeconomic advantage.

Another, more colloquial way of expressing this concept of a "virtuous cycle" is "that the rich get richer while the poor get poorer." Richness, of course, is measured both in financial, as well as cultural, capital (Bourdieu, 1984; Bourdieu, 1977). A facet of this concept is the recognition that the financial and cultural capital derived from attending highly selective institutions is generally greater than attending less selective or non-selective institutions (Hearn, 1988; Persell et al., 1992; Smart, 1986, 1988; Mueller, 1988).

The extent to which this "virtuous cycle" is impacting college choice in America has major implications for a variety of higher education policy issues--admissions foremost among them. The widening chasm between the "haves" and the "have-nots," combined with the growing importance of college education to financial and social well-being, compels researchers to revisit this phenomenon in the hopes of preventing the chasm from widening any further. Affirmative action has been one means of narrowing the chasm, but, as mentioned above, it is currently endangered. Now is the time to examine the validity of an alternative method of narrowing the chasm, one that would replace the former affirmative action plans based on race and ethnicity.

RACE-BASED AFFIRMATIVE ACTION

The recent debate regarding the use of affirmative action has captured the nation's attention. Decades old policies promoting access and opportunity to people who have been historically discriminated against are being called into question. The potential for changes in our society's acceptance of affirmative action is real. Arguably, nowhere would change in the acceptance of affirmative action policy affect the future of our nation than in the admission of students to college.

In the past decade, affirmative action admissions policies have provided underrepresented minority students with unprecedented access to higher education. Some feel that it is time to retire these policies because the intent to right past wrongs has been accomplished. Others feel just as

passionately that we have a long way to go in providing equal access and opportunity to all of the people of this nation and admission to college is one of the most important and fundamental opportunities that must exist in this regard. Higher education communities across the nation are listening and watching this exercise of the democratic process with interest and concern. Many institutions, if they haven't been forced to already by legal means or constituent pressure, have begun a self-evaluation of their affirmative action policies as they are applied in their admissions process. Institutions are anticipating potential questions they may have to answer from the press, alumni, their state legislatures, and the public in general, about how and why affirmative action is used in selecting students for admission. It is in this environment of serious consideration that affirmative action policies for college admissions have begun to evolve.

The use of affirmative action based on racial and ethnic characteristics in the admission of underrepresented students to institutions of higher education has recently been questioned by states around the country. As an alternative, the socioeconomic status of prospective college applicants is being considered as a socially acceptable factor for colleges to consider in admitting students to ensure a "diverse" student body. This alternative has the added benefit of providing an opportunity to those of low socioeconomic status to break the "poor get poorer" cycle.

REVIEW OF RELATED LITERATURE

Much of the research that has been done surrounding issues pertaining to college admissions focuses on various decision-making processes used by students as they choose institutions in which to apply and eventually enroll. The stages that students go through in the college selection process have been of special interest to college admissions officials and educational researchers alike. In this regard, Hossler and Gallagher have produced a model for explaining how students choose colleges and universities in which to enroll. Their model is divided into three phases: predisposition, search, and choice (Hossler and Gallagher, 1987).

For the purposes of this paper, Hossler and Gallagher's college choice model, specifically the predisposition phase, provides a conceptual beginning in explaining the influence of

socioeconomic status, race, and academic achievement on college choice. As theirs is a "meta-model", a synthesis of previous college choice models, it contributes foundational theoretical approaches to explaining how and what predisposes students to attend college (p.210 -213). Hossler and Gallagher's model, though it does recognize socioeconomic status, race, and measures of academic achievement as influential factors in the predisposition phase of college choice, does not directly address how and why students are influenced to attend specific types of institutions, i.e., highly selective versus not selective.

Several studies have contributed to a better understanding of the influence of particular student characteristics on how students choose institutions in which to enroll. In this regard, some of the studies have attempted to explain the combined effects of various factors such as socioeconomic status and race (Karraker, 1992), socioeconomic status and gender (Persell, Catsambis, and Cookson Jr., 1992), race and gender (Flanagan, 1993), and race, class, and gender (Solorzano, 1992), academic achievement, race, and socioeconomic status (Hearn, 1984; McDonough et al., 1997). Other research of college choice has addressed the influence of individual characteristics such as race (Clark and Crawford, 1992; Johnson, 1992) and socioeconomic status (McDonough, 1994; Gos, 1995).

This study was significantly influenced by the previous research completed by Hearn (1984) on the influence of socioeconomic status, race (and other "ascribed" characteristics), and academic achievement on students selecting institutions of higher education with selective admissions policies and by Persell, Catsambis, and Cookson Jr.'s study (1992) on the influence of socioeconomic status and gender on student enrollment trends in selective colleges.

Hearn's assertion that "it appears that both the academically and socioeconomically "rich" become richer (i.e., attend schools having superior intellectual and material resources) while the academically and socioeconomically "poor" became poorer (1984, p. 22)" was especially provocative given this study's interest in the potential effects of replacing race with socioeconomic status in affirmative action policies for the admission of students to selective colleges and universities.

Hearn's focus on the influence of three broad factors, academic achievement, ascribed characteristics (race, ethnicity, and sex), and socioeconomic status, on the types of institutions that students are inclined to attend provided the theoretical framework from which independent variables were defined for this study.

Persell, Catsambis, and Cookson Jr.'s (1992) elaboration of Bourdieu's theory of cultural capital conversion also provided support for the use of socioeconomic status, academic achievement and gender as influential factors that may act on the process of college choice, subsequently solidifying the stratification of American society.

METHODOLOGY

Research Question

The purpose of this exploratory study is to attempt to answer the following research question: Are the academically and socioeconomically advantaged students more predisposed to attend highly selective institutions than students without those same academic and socioeconomic advantages? Another more colloquial way of expressing this issue is that "do the rich get richer while the poor get poorer"? Richness can be measured both in terms of financial as well as cultural capital (Bourdieu, 1984 and Bourdieu, 1977). This concept can be extended to suggest that the financial and cultural capital derived from attending highly selective institutions is generally greater than attending less or non-selective institutions (Hearn, 1988 and Persell, et. al., 1992).

Data Sources

This study draws upon one data source called the Cooperative Institutional Research Program (CIRP). CIRP is a longitudinal study of the American higher education system that measures the impact of different types of college environments on a student's development. It started in 1966 at the American Council on Education when they began surveying entering

freshmen classes. CIRP is now the nation's largest and oldest empirical study of higher education involving data on some 1,300 institutions, more than 8 million students and more than 100,000 faculties. In 1973, CIRP was transferred to the Graduate School of Education at the University of California at Los Angeles (UCLA). The annual CIRP freshman and college student surveys are now administered by the Higher Education Research Institute at UCLA under the continuing sponsorship of the American Council on Education.

Sample

The sample that was used was taken directly from the CIRP data from 1986, which is made up of 4,408 college freshmen who entered a selected national sample of colleges and universities. The sample was randomly selected from the population of freshman survey respondents included in the national norms for 1986 and 1988.

Longitudinal follow-ups were conducted at irregular intervals, in the early years of CIRP, due to funding. But since 1982, annual follow-ups have been conducted on freshmen two and four years after entering college. CIRP also includes data from a 1990 follow-up study of surveyed students who entered college in 1986 and 1988. The CIRP uses Astin's (1991) model of input - environment - outcomes. The freshman survey collects input data and the follow-up survey collects outcome data and information on the experiences of students since entering college. This study will focus primarily on the data collected on the freshmen entering college in 1986.

Variables

The variables selected for this study were grouped into three clusters. The first cluster consisted of socioeconomic variables such as income, fathers' and mothers' educational level, and fathers' and mothers' occupation. The second cluster was race. The CIRP data set identifies seven racial groups. These seven racial groups were collapsed into two racial groups, white and Asian as one and all others were placed into a second group. The third cluster of variables were background variables such as Scholastic Aptitude Test (SAT) Scores, high school grade point

average, sex and high school rank. These three clusters of variables were considered as the independent variables. **Institutional selectivity** was identified as the dependent variable. It should be noted that the dependent variable, institutional selectivity, was recoded into 3 values corresponding to high, medium, and low selectivity. The SAT scores used to determine these three categories were taken from Dey, Astin, Korn and Riggs (1992) which used SAT scores of 1175 or above as high, 1038 to 1174 as medium and 1037 and below as low selectivity.

Analysis

Table 1 below describes the measures and constructs used in the analysis of the data. Fathers' and mothers' educational level in the original CIRP data set contained eight values. These eight values were recoded into 3 different values identified as high, medium and low. The high value corresponded with having some graduate school or a graduate degree, medium corresponded with having a college degree and low was categorized as some college, postsecondary education, a high school diploma, or below. Also, fathers' and mothers' occupation contained 48 different occupational values. These were recoded into three values again corresponding with high, medium and low categories described above as with educational levels. Those occupations requiring degrees above a bachelor's level were categorized as high, those requiring a bachelor's degree were labeled as medium and the remaining occupations were labeled as low. As mentioned above in the section on variables, race was recoded into two values, whites and Asians into one value and all other races (American Indian, Black, Chicano, Puerto Rican and Other) into the second value. This created a new recoded race variable. Crosstabulations bear out the fact that in terms of socioeconomic factors, White and Asian students are similar enough to justify combining them into one category.

The SAT scores used for this study were a slightly different version of the scores in the original CIRP data set. The CIRP data set includes SAT scores that are either below the minimum or maximum levels of possible SAT scores. It is assumed that some respondents incorrectly labeled SAT Verbal and Math scores as being below 200 and above 800. Therefore,

the new or revised version of these data discarded those scores below a 200 and above 800 on SAT Verbal or Math. Then, the SAT Verbal and Math scores were computed into one new variable labeled as nsattotl (New SAT Total Score).

High school grade point average was recoded into three categories of high, medium, and low. High was identified as A- and above, medium as B+ to B- and low as C- and below. Again, this was done in keeping with our general idea of categorizing variables into high, medium and low. The remaining variables, sex and high school rank were not recoded in any form and were used as they appear in the original CIRP data set.

In addition to recoding data, other statistical analyses were used in the study. Frequency distributions were run before and after recoding variables to verify that recoding was done correctly. Crosstabulations were used to identify trends in the data analysis. Multiple regression analysis was used to identify the significant variables that contribute to students attending highly selective institutions. Once all of the variables were recoded, all independent variables were entered into a regression equation. Institutional selectivity, recoded, was entered into the regression equation as the dependent variable. Forced entry method was used to enter each independent variable into the regression equation one at a time. Regression coefficients and other regression statistics were calculated to observe the effect of each independent variable as it was entered into the equation. This method also allowed for the measurement of the effect of each of the three blocks of independent variables. Finally, all statistical analyses were conducted in accordance with standard statistical methods (Hinkle, Wiersma, & Jurs, 1994; Schroeder, Sjoquist, & Stephan, 1986; Kim & Mueller, 1978; Norusis, 1990; Achen, 1982 and Spector, 1992).

Table 1
Measures and Scales for the Regression Education

<i>Dependent Variable</i>	Recoded into three values
Institutional Selectivity	1 = "200 to 1037"; 2 = "1038 to 1175"; 3 = "1176 above"
<i>Independent Variables</i>	
<i>Socioeconomic Characteristics</i>	
Income Recoded into	1 = "Below \$29,999"; 2 = "\$30,000 to \$74,999"; 3 = "\$75,000 or more"
Father's Education	Recoded into 1 = "Postsecondary, High School or less"; 2 = "College Graduate"; 3 = "Some Graduate School and Graduate Degree"
Mother's Education	Recoded same as Father's Education
Father's Occupation	Recoded into 1 = "Actor, Artist, Business (Clerical), Business Owner, Farmer, Homemaker, Interior Decorator, Lab Technician, Military Service, Skilled Trades, Laborer, Semi-skilled Worker, Unemployed"; 2 = "Accountant, Business, Clergyman, Clergy (other), Computer Programmer, Conservationist or forester, Dietician, Engineer, Foreign Service Worker, Interpreter, Law Enforcement, Musician, Nurse, Social Worker, Statistician, Therapist, Teacher (elementary), Teacher (secondary), Writer/journalist"; 3 = "Architect, Business Executive, Clinical Psychologist, Pharmacist, Physician, School Counselor, School Principal, Scientific Researcher, Veterinarian"
Mother's Occupation	Recoded same as Father's Occupation
Race	Recoded into 1 = "White and Asian"; 2 = "Black, Native American, Chicano, Puerto Rican and Other"
<i>Background Characteristics</i>	
SAT Scores	SAT Verbal + Math computed into a SAT Total score
High School Grade Point Average	Recoded into 1 = "C- and below"; 2 = "B- thru B-"; 3 = "A- and above"
Sex	1 = "Male"; 2 = "Female"
High School Rank	1 = "Lowest 20%"; 2 = "Fourth 20%"; 3 = "Middle 20%"; 4 = "Second 20%"; 5 = "Highest 20%"

RESULTS

The results of the statistical analyses confirm the research hypothesis that academically and socioeconomically advantaged students are more predisposed to attending highly selective institutions. Put more simply, "the rich are getting richer while the poor are getting poorer". Results of the multiple regression analysis confirm that income is a significant predictor of institutional selectivity. Furthermore, crosstabulation results of income by high selectivity indicate that the largest percentage of high income students (18.3 % for High, vs. 8% of Medium, vs. 4.5% for Low), do attend highly selective institutions. These data are listed in Table 2 below.

Tables 2, 3, and 4 are crosstabulation data of socioeconomic characteristics divided into three levels (high, medium, and low) and institutional selectivity, also divided into high, medium, and low categories. These tables demonstrate that students who come from families with high levels of income, high parental education, and a high parental occupation tend to attend, in higher percentages, highly selective institutions. Also, the inverse is true. Students from families with low socioeconomic status attend least selective institutions in larger numbers.

Table 2
Crosstabulations of Socioeconomic Characteristics, Divided into Three Levels of Students
Attending Highly Selective Institutions.

Level of SES Characteristics	Percent of CIRP Respondents				
	Income Level	Father's Ed. Level	Mother's Ed. Level	Father's Occupation	Mother's Occupation
HIGH	18.3%	16.2%	17.6%	14.5%	16.3%
MEDIUM	8.0%	8.4%	11.3%	8.9%	9.0%
LOW	4.5%	3.7%	4.9%	5.3%	7.6%

Table 3
 Crosstabulations of Socioeconomic Characteristics, Divided into Three Levels of Students
 Attending Moderately Selective Institutions.

Levels	Percent of CIRP Respondents				
	Income Level	Father's Ed. Level	Mother's Ed. Level	Father's Occupation	Mother's Occupation
HIGH	31.7%	30.0%	25.8%	26.9%	23.6%
MEDIUM	21.3%	21.6%	26.3%	22.4%	21.4%
LOW	13.0%	13.9%	16.3%	14.2%	19.7%

Table 4
 Crosstabulations of Socioeconomic Characteristics Divided into Three Levels by Least Selective
 Institutions.

Levels	Percent of CIRP Respondents				
	Income Level	Father's Ed. Level	Mother's Ed. Level	Father's Occupation	Mother's Occupation
HIGH	50.0%	53.7%	56.6%	58.6%	60.1%
MEDIUM	70.7%	69.9%	62.4%	68.7%	69.5%
LOW	82.5%	82.4%	78.9%	80.5%	72.7%

Crosstabulation data of income by race sex, institutional selectivity by academic achievement, and institutional selectivity by race sex and by academic achievement can be found in Tables 5 through 8.

In regards to race, as can be seen in Table 5, twice as many White and Asian students (8.5%) attend highly selective institutions as compared to other racial groups (4.4%). Conversely, a much larger number of other racial groups attend least selective institutions (86.2%) as compared to White and Asian students (69.8%).

Regarding gender, a larger percentage of males (9.9%) attend highly selective institutions as compared to females (7.1%). Not surprisingly, the opposite is true for least selective institutions where we found that a larger percentage of females (74.7%) attended least selective institutions as compared to males (68.1%).

Table 5
Crosstabulations of Institutional Selectivity by Race and Sex

Institutional Selectivity	RACE		SEX	
	White Asian	Other Minorities	Male	Female
HIGH	8.5%	4.4%	9.9%	7.1%
MEDIUM	21.7%	9.4%	22.0%	18.2%
LOW	69.8%	86.2%	68.1%	74.7%

As can be expected, Table 6 demonstrates that a higher percentage of students with high academic achievement, as defined by SAT Scores (16.3%) and "A" Grade Average (16.8%), attended highly selective schools as compared to students with lower academic achievement (SAT Scores, 0.5%; and "C" & below Grade Average, 0%).

Table 6
Crosstabulations of Institutional Selectivity by Academic Achievement.

Percent of CIRP Respondents' SAT Total Scores and High School Grade Averages						
Institutional Selectivity	High SAT A- to A-		Medium SAT B- to B-		Low SAT C- & Below	
HIGH	16.3%	16.8%	5.1%	4.4%	0.5%	0.0%
MEDIUM	26.8%	26.4%	20.2%	18.8%	10.5%	3.5%
LOW	56.8%	56.7%	74.7%	76.8%	88.9%	96.5%

Table 7
Crosstabulations of Income by Academic Achievement.

Percent of CIRP Respondents' SAT Total Scores and High School Grade Averages						
Income Levels	High SAT A- to A-		Medium SAT B- to B-		Low SAT C- & Below	
HIGH	16.8%	14.6%	14.0%	15.2%	12.9%	14.5%
MEDIUM	56.3%	55.5%	54.1%	54.9%	53.1%	50.1%
LOW	27.0%	29.9%	31.9%	30.0%	38.0%	35.3%

It was surprising to note that income, when compared to academic achievement as illustrated in Table 7, was not an important differentiator of high, medium or low academic achievement. It seemed that in most cases, students' high, medium, and low income levels were nearly equally distributed among the high, medium, and low academic achievement levels.

Table 8
Crosstabulations of Income by Race and Sex.

Income Levels	Percent of CIRP Respondents			
	RACE		SEX	
	White Asian	Other Minorities	Male	Female
HIGH	15.7%	7.6%	16.4%	13.3%
MEDIUM	56.0%	40.7%	55.3%	54.1%
LOW	28.3%	51.7%	28.3%	32.7%

Socioeconomic Characteristics

Socioeconomic characteristics were entered into the regression equation one at a time to measure the contribution of each variable. Of the five characteristics, three were found to be significant in determining institutional selectivity. Income, father's and mother's educational level were significant contributors to institutional selectivity. Table 9 illustrates the unstandardized and standardized regression coefficients for the socioeconomic characteristics as well as all of the other measures used in the multiple regression analysis. Income is the second

most important independent measure in determining institutional selectivity. Father's and mother's career were not determined to be significant in the regression equation. All socioeconomic measures accounted for only 9% of the variance. The three significant measures accounted for 8% of the total 9% of the variance. Income alone accounted for 5% of the variance with the socioeconomic measures.

Table 9
Regression of Institutional Selectivity on Socioeconomic, Race and Background Measures

Institutional Selectivity (N = 2,592)					
Measure and Variable	b ¹ Beta ¹	b	Beta	T value	
<i>Socioeconomic Characteristics</i>					
Income	.13	.13***	.14	.14***	6.998
Father's Education	.10	.14***	.08	.11***	4.498
Mother's Education	.08	.09***	.06	.07**	3.189
Father's Occupation	.03	.04	.03	.03	1.629
Mother's Occupation	.00	.00	.02	.02	.796
<i>R</i> ²		.091			
<i>Race</i>	-.12	-.05**	.07	.03	1.532
<i>R</i> ²		.092			
<i>Background Characteristics</i>					
SAT Total Score			.17	.22***	11.628
High School GPA			.21	.21***	11.336
Sex			-.07	-.05**	-3.083
<i>R</i> ²			.203		
<i>Constant</i>			-.01		-.0772

Note: * denotes $p < .05$; ** $p < .01$; *** $p < .0001$.

The first column of b and Beta regression coefficients shows the results of Selectivity after Socioeconomic Characteristics and Race are controlled for in the regression equation

Race

Race as a measure was also significant in determining institutional selectivity. White and Asian students chose highly selective institutions over other racial student groups. Race accounted for a meager two tenths of one percent of the variance, which means that race is significant, but not a strong predictor of institutional selectivity. When we controlled for income, parental education, and parental occupation we found that the White or Asian student would be more likely to choose a selective institution. Conversely, a minority student would be less likely to choose a selective institution.

Background Characteristics

All four background measures were significant in predicting institutional selectivity. All four background measures accounted for 11% of the total 20% variance. The most significant variable in the entire equation was SAT total scores. This variable alone accounted for 7% of the total 20% variance in the regression equation. High school grade point average, and sex were also significant, but these three background characteristics accounted for only 3% of the total variance. The regression coefficients for sex were negative which meant that women were less likely to attend highly selective institutions. In other words, men were more inclined to attend highly selective institutions of higher education. Background measures in this study were significantly important in predicting student's attendance at highly selective colleges and universities.

Summary

In summary, six of the nine independent variables were significant in predicting institutional selectivity. When controlling for all other variables, SAT Total Scores was the most significant estimate of institutional selectivity. The next most important independent variable on institutional selectivity, when controlling for other factors, was High School GPA, which would confirm the research hypothesis that the academically advantaged are retaining their advantage. Table 10 provides the means and standard deviations for all variables used in the equation.

Table 10
Means and Standard Deviations for All Variables

Measure and Variable	Mean	Standard Deviation
<i>Dependent Variable</i>		
Institutional Selectivity	1.398	.650
<i>Independent Variables</i>		
<i>Socioeconomic Characteristics</i>		
Income 1.890	.659	
Father's Education	1.888	.865
Mother's Education	1.616	.770
Father's Occupation	1.953	.823
Mother's Occupation	1.505	.629
<i>Race</i>	1.084	.278
<i>Background Characteristics</i>		
SAT Total Scores	1124.729	172.778
High School GPA	2.302	.632
Sex	1.461	.499

Note: see table 1 for coded values.

DISCUSSION

Given these results, what are the possible explanations, or interpretations, for the significance of income, level of parents' education, race, and background characteristics on a student's decision to attend a highly selective institution? Also, how should the relative insignificance of parents' occupation be interpreted? What follows is an attempt to interpret the results derived from the statistical tests run on the CIRP data. It should be noted that interpretation, by definition, is an inexact science, and these interpretations are not exhaustive.

Regarding the significance of income, there are at least three possible interpretations. The first is that coming from a family with a high income may provide students with a sense of financial empowerment. The average cost of tuition at the most selective institutions has been

growing steadily for the rest twenty years, and for most people, the mere thought of spending \$25,000 for one year of college is very intimidating.

At the same time, stories in the popular press contribute to this intimidation factor with cover stories such as "How Colleges Are Gouging U: A Special Investigation into why tuition has soared." (Time, March 31, 1997) The institution investigated in the story was the University of Pennsylvania, one of the nation's highly selective institutions. Reading such stories and hearing estimates that a four-year college degree may cost more than \$100,000 are enough to frighten potential applicants from lower socioeconomic classes away from the Ivy League and even some of the public Ivys, which have out-of-state tuition rates comparable to their private peers. Those students from families with the income to afford these tuition rates are more likely to feel empowered to pursue such schools as options, rather than students from low income families, who are more likely to dismiss such schools practically from the start.

Money also seems to impact a student's sense of social self-esteem. The student from a low income family asks him herself if he/she will have the money not only to afford the essentials--room and board, tuition and books--but also the amenities--nights out on the town, road trips, athletic events--that are a vital part of the collegiate experience. If the answer is no, the student may be reluctant to pursue that college as an option. Certainly, some college towns are more expensive than others, and some student bodies are more wealthy than others. The prospect of having less money than one's classmates and peers, or not enough money to go to the football games on the weekends, also has a chilling effect on college choice.

Finally, students from high income families are more likely to have access to better and more complete information about colleges, such as the expensive college guides from Peterson's and the Yale Daily News. These students are also more likely to employ the services of private consultants to facilitate the choice process (McDonough et al., 1997), and these students are also more likely to have the disposable income necessary to afford visits to distant campuses. All of these things--guides, consultants, and campus visits--seem to favor the most expensive and selective institutions.

The significance of parents' education has parallels to the significance of income in that well-educated parents contribute to a student's sense of empowerment and esteem. Intuitively, it seems reasonable to assume that most well-educated parents want their own children to enjoy the same advantages they had, and most parents would acknowledge those advantages were, in large part, a product of their college education. This would be even more likely if the parents attended highly selective institutions.

Well-educated parents are also more likely to foster a culture of achievement in their children, socializing them to believe in the intangible value of an institution simply because it is Harvard or Duke. In the race to "keep up with the Joneses," well-educated and more affluent parents may also encourage their children to attend a highly selective institution because such attendance is a definite sign of social prestige--not only for the child, but also for the parents. Related to this is the possibility, perhaps more prevalent in earlier generations but still at work today, that parents want their children to marry and befriend people with similar incomes and socioeconomic advantages. Particularly in terms of marriage, the pressure to "marry into one's own class" or even to "marry up," or above one's class, is still a factor for some wealthy families, despite the risks of engendering elitist attitudes and the inability to interact with people from a variety of different socioeconomic backgrounds.

The importance of race is questionable. As this paper's model of institutional selectivity reveals, race was not a significant factor in predicting institutional selectivity. The results provided in this report seem to indicate that race is really of limited practical value as an explainer, or predictor, of attendance at highly selective institutions. Perhaps this is a sign of the increasing parity among the races in terms of selective college attendance. In any event, race is also likely to be a factor, and perhaps a more significant one, in income and background characteristics, which makes its role as a factor in institutional selectivity even more tricky and ambiguous.

The significance of background characteristics, or academic achievement is not a surprising finding. Intuitively, strong academic performance provides the best chance for admission to highly selective institutions. The reputation of these institutions as home to the "best and brightest" has

been cultivated over the years, and clearly, they seek students who will bring extraordinary skills and talents to the student mix. The connection between the high-achieving student and the highly selective institution is a natural and firmly entrenched one.

Additionally, high academic achievement might translate into greater self-confidence, or again, that sense of empowerment that money also provides. Such a student is more likely to be attracted to the competitive and selective nature of the admissions process at these schools than a student who is unsure of his/her abilities and how he/she "stacks up" against a deep and talented applicant pool. Likewise, most students are aware of the continued importance highly selective institutions give to indicators of achievement like SAT, ACT and GPA. Despite the recent controversies over the potential gender and racial bias of these standardized tests, and the ambiguity of a measure like GPA, highly selective institutions still employ them to greater or lesser degrees. Perhaps these measures are used to make the initial cut in the process, or to break a "tie" between two applicants who are otherwise very similar, but the fact remains they are used, and students--especially advantaged students--are acutely aware of it.

The final interpretations of the significance of these background variables are also somewhat inter-related. High academic achievers tend to develop their own peer groups in secondary school, and this peer group tends to develop what could be called a "college-prep track culture." This culture is marked by peer pressure to take the most advanced courses offered, participate in extracurricular activities, and compete for scholastic honors. It seems natural to assume that this pressure and level of expectation carries over into the college choice process, where a student version of "keeping up with the Joneses" may be occurring--if one member of the peer group applies to Harvard, the pressure or expectation to apply to Harvard or some comparable institution, becomes a factor. Similarly, students who have enjoyed this kind of peer group in high school may seek a similar peer group in college, and highly selective institutions are the places where they are most likely to find such a peer group and culture. Based upon the results of this study, background characteristics and socioeconomic status were the most important issues in determining institutional selectivity.

Figure 1 in the appendix provides a model or graphical representation of the factors affecting institutional selectivity.

Conclusion

The tide of public opinion, political will, and perhaps judicial precedent has turned against a system of affirmative action based on race, ethnicity, and gender. One of the most pressing challenges facing American higher education, and particularly the most selective institutions of higher education, is how to maintain a diverse campus against this tide, which has the potential to return some campuses to the days when they were enclaves of wealthy whites. For years, attendance at the highly selective institutions was a privilege reserved for this group, and as a result, the bulk of the financial and cultural capital in this country was, and continues to be, concentrated in this group.

In order to distribute this financial and cultural capital in such a way that both diversity and fairness ensue, a new paradigm must emerge and the highly selective institutions in this country must have the courage of their convictions to embrace it. That new paradigm features the use of socioeconomic status instead of race, ethnicity, and gender in an affirmative action strategy. To that end, this paper has taken the first, largely theoretical steps toward a better understanding of the characteristics of students at highly selective institutions and the subsequent effects of replacing race and ethnicity with SES to ensure diversity. The road ahead promises to be a controversial and difficult one, but it is a journey the nation and its leading universities must make.

IMPLICATIONS

If one assumes that the results from this study are representative and predictive of how students, based on several factors, including race, gender, socioeconomic status, and academic achievement, are distributed among various colleges by levels of selectivity, then replacing race

with socioeconomic status as a factor in affirmative action policies for college admissions would appear to assist in diversifying the student bodies of campuses across the country.

Diversifying the socioeconomic mix of students in the nation's most prestigious colleges and universities will provide those students from the lower socioeconomic levels with the academic and cultural environment that will allow them to pursue careers and leadership positions which to date are most often assumed by those from the highest levels of socioeconomic status. Having more academically able people who come from socioeconomically disadvantaged backgrounds in professional careers and leadership positions will assist in building increased understanding and respect between the great variety of people that comprise American society, subsequently closing the gap between the nation's "haves" and "have nots". Taking affirmative action to enroll a socioeconomically diverse group of students would, extrapolating from the results of this study, provide the most selective institutions of higher education racial diversity as well.

Though, in theory, the results of diversifying the socioeconomic mix of students at highly selective colleges and universities would appear to be beneficial for all involved, there are potential problems that may arise from this type of social engineering. Would selective institutions be required to provide more financial aid to students each year if they considered socioeconomic status instead of race in admissions policies meant to diversify their student bodies? If so, how much, on average, would the annual increase be in financial aid given to students and could these institutions reasonably afford these increases. What, if any, would be the challenges faced by the students on a socioeconomically diverse campus? Would students from "each side of the tracks" find enough common ground to learn from each other? On what basis would institutions determine the "appropriate" enrollment ratio of students from various levels of socioeconomic status? What, if any, types of special recruitment efforts would have to be undertaken by institutions to attract students from various socioeconomic levels?

Answers to the type of questions posed above form the basis for future research in this regard. Though it would appear that at the very least, selective institutions would have to make the

same commitment to enrolling and providing a supportive campus environment to students from underrepresented socioeconomic groups as they currently attempt to do for students from underrepresented racial and gender groups, institutions should proactively seek to understand the dynamics that this change in their student bodies would bring. In other words, with research, they can approach change with their eyes open.

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